- MURRAY, B. G. and C. A. WILLIAMS. 1976. Chromosome number and flavonoid biosynthesis in Briza L. (Gramineae). Biochem. Genet. 14:897–904.
- PERO de MARTINEZ, M. A. del and T. SWAIN. 1977. Variation in flavonoid patterns in relation to chromosome changes in Gibasis schiedeana. Biochem. Syst. Ecol. 5:37-43.
- PETERSEN, R. L. and D. E. FAIRBROTHERS. 1980. Flavonoid synthesis and antheridium initiation in Dryopteris gametophytes. Amer. Fern. J. 70:93–95.
- SMITH, D. M. and J. B. HARBORNE, 1971. Xanthones in the Appalachian Asplenium complex. Phytochemistry 10:2117-2119.
- STEEVES, T. A., I. M. SUSSEX and C. R. PARTANEN. 1955. In vitro studies on abnormal growth of prothalli of the bracken fern. Amer. J. Bot. 42:232-245.
- WALLACE, J. W., K. R. MARKHAM, D. E. GIANNASI, J. T. MICKEL, D. L. YOPP, L. D. GÓMEZ, J. D. PITTILLO and R. SOEDER. 1982. A survey for 1,3,6,7-tetrahydroxy-C-glycosylxanthones emphasizing the "primitive" leptosporangiate ferns and their allies. Amer. J. Bot. 69:356–362.

## REVIEW

THE GENUS SELAGINELLA IN TROPICAL SOUTH AMERICA, by A. H. G. Alston, A. C. Jermy, and J. M. Rankin. Bull. Brit. Mus. (Nat. Hist.), bot. ser. 9(4):233-330. 1981. £14.00 postpaid.—A. H. G. Alston was the premier Selaginella authority in the middle of this century. He published extensively on the genus in the Old World and in southern South America, Brazil, the West Indies, and Central America in the New World. At the time of his death, he had begun to study Selaginella from the Andean countries and the Guyanas. The present paper completes and extends Alston's work and includes Brazil, thus accounting for virtually all of tropical South America. The region contains 133 species and six infraspecific taxa of Selaginella. A table of species distribution by countries shows that Colombia has by far the greatest number of species. The bracketed key to the species can be read forward or backward, a decided advantage because there are no species descriptions. Each taxon treated has a synonymy, a statement of range, a list of specimens, and, sometimes, additional notes. The authors have uncovered some overlooked synonyms in rare literature, always a pleasure to see. However, most synonyms state only the country where the type was collected, rather than the type locality, the collector and number, and the herbarium of deposit. A list of references and an index to accepted names and synonyms concludes the volume. New taxa are illustrated by a photograph of the herbarium sheet and by SEM photographs of the leaves, which range in magnification upwards from a mere eight times natural size, a useful technique for illustrating clearly the cilia and other small details of the leaves. This paper is indispensible for identifying Selaginellas from tropical America and will be the standard reference for many years to come.—D.B.L.